



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/593,286

09/18/2006

Gerard Sabiron

Q97013

8464

23373 7590 02/10/2009
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

BASTIANELLI, JOHN

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

02/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,286	Applicant(s) SABIRON ET AL.	
	Examiner John Bastianelli	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/18/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the dotted lines of stem 122 appear to be in error as this should be solid lines like Figs. 3-8. The magnet coil 132 that the reference designation is pointing to in Fig. 2 appears to be empty space. Either this should be hatched and included in Fig. 1 or be pointing to the other part inside 130 which should be hatched. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: The terms “an amagnetic” appear throughout the specification. Appropriate correction is required.

Claim Objections

3. Claim 8 is objected to because of the following informalities: The centering means being fins should be dependent upon claim 7 and not claim 6 as the fins are disposed on the shutter and not the on the lateral wall. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The metes and bounds of the term “flap-forming part” is not understood as this is not seen as a flap at all

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3753

7. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “flap-forming part” in claim 1 is used by the claim to mean “the piece of the shutter that contacts the valve seat”, while the accepted meaning is “something broad, limber and flat.” The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7, and 9-15, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Fuller, Jr. US 3,556,156.

Anderson discloses a valve (Figs. 1-3) having a shutter (lower 24 in Fig. 1/linkage 44 in Fig. 2/ 46 in Fig. 3) placed in a chamber provided in a valve body 16, an end of said chamber being provided with a seat 18 against which a flap-forming part (24 closest to

Art Unit: 3753

seat 18 on Figs. 1-2 or 48 in Fig. 3) of the shutter rests in a closed position of the valve and is remote therefrom in an open position of the valve and a magnetic control device including shutter magnetic drive means 30 disposed outside the chamber for moving it either to its closed position or to its open position, wherein said magnetic control device further comprises at least one ball 24 which is made of a magnetic material, disposed in said chamber and which is coupled to said external magnetic drive means, said ball being associated with said shutter in such a way that said shutter is driven in said chamber when said ball is itself moved by said external magnetic drive means. The ball turns freely relative to said shuttle. The shutter has at least one housing (44 in Fig. 2, curved portion of 46 in Fig. 3) in which at least one ball is placed. The valve is adapted to center said shuttle in said valve body (balls ride along walls thus centering it). The shutter is associated with at least two balls offset longitudinally (Figs. 1-3) or angularly (Fig. 1, for example, left ball at the top relative to right ball 2nd from top) relative to the axis of said shutter. The two separate sections of said shutter associated with at least two balls disposed so the angular offset between two successive balls of a same section is equal to 180 degrees and 2 balls of a section are angularly offset by an angle equal to $360/2 = 180$ degrees. At least one fluid passage groove 28 and 28' is machined in the inside wall of said chamber and a rolling area is formed on either side of said groove (Fig. 3). The drive means 30 being a magnet moving parallel to the longitudinal axis to drive the ball simultaneously (by moving rod 40, col. 2, lines 48-75).

10. Claims 1-2, 4, 6-7, and 13, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. US 6,276,663.

Art Unit: 3753

Anderson discloses a valve 10/54 having a shutter 20/64 placed in a chamber provided in a valve body 12/56, an end of said chamber being provided with a seat 14f/58f against which a flap-forming part 20a/64a of the shutter rests in a closed position of the valve and is remote therefrom in an open position of the valve and a magnetic control device including shutter magnetic drive means 25/69 disposed outside the chamber for moving it either to its closed position or to its open position, wherein said magnetic control device further comprises at least one ball 42/86 which is made of a magnetic material, disposed in said chamber and which is coupled to said external magnetic drive means, said ball being associated with said shutter in such a way that said shutter is driven in said chamber when said ball is itself moved by said external magnetic drive means. The ball turns freely relative to said shuttle. The valve is adapted to center said shuttle in said valve body (36b with outer wall of 20)/(80e or 62a with outer wall of 64b) wherein centering means are disposed inside said chamber or on said shutter so as to cooperate with said shutter or internal lateral wall of said chamber. At least one fluid passage groove (seen in 84) is machined in the inside wall of said chamber and a rolling area is formed on either side of said groove (Fig. 4).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3, 5, and 9-13, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 6,276,663 in view of Fuller, Jr. US 3,556,156.

Anderson lacks at least one housing in which one ball is placed. Fuller discloses a housing 86 in which a ball is placed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the shutter of Anderson be curved where the ball meets it as disclosed by Fuller in order to have a better sliding movement of the device as there would be more surface contact between the shutter and the ball. Anderson lacks at least two balls. Fuller discloses at least two balls 24 offset longitudinally or angularly at 180 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the single ball of Anderson with multiple balls as disclosed by Fuller in order to "provide a more precise positioning" (col. 3, lines 34-36) which also provides centering. Anderson lacks a fluid passage groove. Anderson discloses a fluid passage groove 28 and 28' is machined in the inside wall of said chamber and a rolling area is formed on either side of said groove (Fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a fluid passage groove as disclosed by Fuller in the wall 40 of Anderson in order to provide easier rolling of the ball as fluid pressure would be relieved.

13. Claim 8, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller, Jr. US 3,556,156 in view of Erickson et al. US 5,606,992.

Art Unit: 3753

Fuller lacks centering means which are fins. Erickson discloses centering means which are fins 240. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the centering means of Fuller as fins as disclosed by Erickson in order to keep the valve centered to provide optimal sealing of the valve seat and moving of the shutter.

14. Claim 8, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 6,276,663 in view of Erickson et al. US 5,606,992.

Anderson lacks centering means which are fins. Erickson discloses centering means which are fins 240. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the centering means of Anderson as fins as disclosed by Erickson in order to keep the valve centered to provide optimal sealing of the valve seat and moving of the shutter.

15. Claim 13, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller, Jr. US 3,556,156.

Fuller discloses fluid passage grooves 28 and 28' machined in the inside wall of said chamber with a rolling area between the two grooves. Fuller lacks a rolling area formed on either side of a groove. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the four fluid passage grooves with the rolling area between as disclosed by Fuller into a fluid passage groove machined in the wall in the middle with rolling area between in order to use less grooves as this would reduce production time and cost of making the valve.

Art Unit: 3753

16. Claim 15, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller, Jr. US 3,556,156 in view of Miller US 2,629,401.

Fuller lacks the movable drive means being a magnet. Miller discloses the movable drive means being a magnet 30. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the coil of Fuller with a magnet as disclosed by Miller in order to save electricity.

17. Claims 14-15, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 6,276,663 in view of Miller US 2,629,401.

Fuller lacks the movable drive means being a magnet. Miller discloses the movable drive means being a magnet 30. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the coil of Anderson with a magnet as disclosed by Miller in order to save electricity.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cites valves having balls made of magnetic material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-Th (8-6:30).

Art Unit: 3753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Bastianelli
Primary Examiner
Art Unit 3753

/John Bastianelli/
Primary Examiner, Art Unit 3753